

Claims:

1. An isolated and purified peptide which blocks the binding of an anti-GD3 antibody to a tumor cell expressing GD3 ganglioside and is capable of eliciting antibodies reactive against GD3 ganglioside.
5
2. The peptide of claim 1, wherein the sequence of the peptide is selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.
10
3. The peptide of claim 2, wherein the sequence of the peptide is SEQ ID NO:1.
4. The peptide of claim 2, wherein the sequence of the peptide is SEQ ID NO:2.
15
5. The peptide of claim 2, wherein the sequence of the peptide is SEQ ID NO:3.
6. The peptide of claim 2, wherein the sequence of the peptide is SEQ ID NO:4.
20
7. The peptide of claim 2, wherein the sequence of the peptide is SEQ ID NO:5.
25
8. The peptide of claim 2, wherein the sequence of the peptide is SEQ ID NO:6.
9. A method for eliciting antibodies against GD3 ganglioside in an individual having a tumor expressing GD3 ganglioside comprising the steps of administering to the individual an effective amount of a GD3 peptide mimic, wherein said peptide mimic elicits antibodies to GD3 ganglioside in the individual.
30

10. The method of claim 9, wherein the individual has a tumor selected from the group consisting of neuroblastoma, melanoma and lung carcinoma.

5 11. The method of claim 9, wherein the peptide mimic is administered in conjunction with radiation therapy.

12. The method of claim 9, wherein the peptide mimic is administered in conjunction with chemotherapy.

10

13. The method of claim 9, wherein the peptide mimic is administered following recurrence of the tumor.

14. The method of claim 9, wherein the peptide has a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.

15

15. The method of claim 14, wherein the peptide has a sequence of SEQ ID NO:6.

20

16. An antigenic composition comprising a peptide which blocks the binding of an anti-GD3 antibody to a tumor cell bearing GD3 ganglioside and is capable of eliciting antibodies reactive against GD3 ganglioside and a pharmaceutically acceptable carrier.

25

17. The antigenic composition of claim 16 further comprising an adjuvant.

18. The antigenic composition of claim 16 wherein the peptide has a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6.

30

19. The antigenic composition of claim 18, wherein the peptide has a sequence of SEQ ID NO:6.